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NATIONAL FORESTS

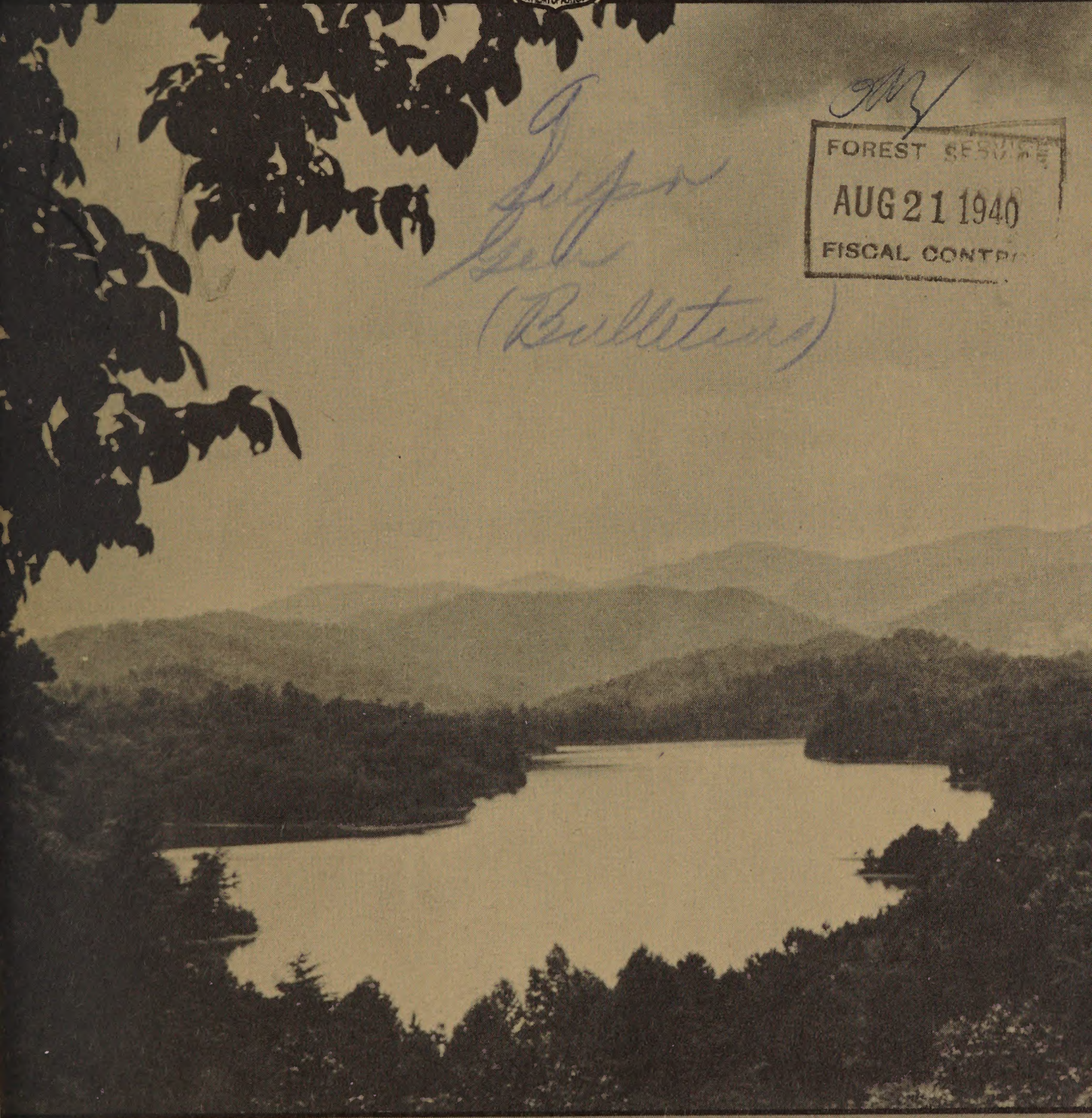
In the

Southern Appalachians

NORTH CAROLINA
TENNESSEE » » »



SOUTH CAROLINA
« « « GEORGIA



National Forests

in the

Southern Appalachians



UNITED STATES DEPARTMENT OF AGRICULTURE
FOREST SERVICE

SOUTHERN REGION



ATLANTA, GEORGIA

MF-42 R.8

COVER PHOTO.—*Lovely Lake Santeetlah in the Nantahala National Forest. In the misty Unicoi Mountains beyond the lake is located the Joyce Kilmer Memorial Forest.*

F-286647

UNITED STATES
GOVERNMENT PRINTING OFFICE
WASHINGTON : 1940



F-386645

Power from national-forest waters: Streams whose watersheds are protected have a more even flow.

Where Rivers Are Born



TWO GREAT ranges of mountains sweep southwestward through Tennessee, the Carolinas, and Georgia. Centering largely in these mountains in the area where the boundaries of the four States converge are five national forests—the Cherokee, Pisgah, Nantahala, Chattahoochee, and Sumter.

The more eastern of the ranges on the slopes of which these forests lie

is the Blue Ridge which rises abruptly out of the Piedmont country and forms the divide between waters flowing southeast and south into the Atlantic Ocean and northwest to the Tennessee River en route to the Gulf of Mexico. The southeastern slope of the ridge is cut deeply by the rivers which rush toward the plains, the top is rounded, and the northwestern slopes are gentle. Only a few of its peaks rise as much as a mile above the sea. The western range, roughly paralleling the Blue Ridge and connected to it by transverse ranges, is divided into segments by rivers born high on the slopes between the transverse ranges. The transverse ranges vary in character, but are usually higher and bolder in configuration than the Blue Ridge. Much of their crestline is at least a mile above sea level and they have many peaks more than 6,000 feet high. The segments of the western range are also as a rule higher than the Blue Ridge and more rugged and precipitous.

Although there is considerable variation in the amount of rainfall in the region the average is higher than for the country as a whole and in some sections of the mountains is higher than for any other part of the United States except portions of the Pacific coast. Situated as they are, spreading a protective mantle over these lands where rise the headwaters of such rivers as the Tennessee, Savannah, and Chattahoochee, the national forests of the southern Appalachians exert an influence over the well-being and prosperity of people and communities in rich agricultural areas many hundreds of miles distant. The waters of these forests are a source of domestic supply for busy cities, the power generated as they run to the seas turns the wheels of industries, and their steady flow contributes to the year-round navigability of the Mississippi.

The peculiar topography of the southern Appalachian region, with its interior



F-588650

Forested slopes conserve rainfall: A portion of the Tellico Fish and Game Management Area in the Cherokee National Forest.

valleys cut off from the Piedmont and Coastal Plain by an unbroken rampart, its river systems separated one from another by high ranges of mountains, and access to the great valley of the Tennessee blocked by mountains cut by rocky gorges, has had a notable influence on the settlement and development of the region. Railway and highway construction encountered such obstacles that it is only within the past generation that the section has been well opened up. Even today there are considerable areas without modern means of transportation.

*PRESERVE NATURAL BEAUTY
HELP PREVENT FIRES*

Home of the Cherokees



IT IS POSSIBLE that De Soto, in 1540, was the first white man to see this southern Appalachian region; there is some evidence also that the expedition of Don Tristan de Luna y Arellana penetrated to the western tip of North Carolina in 1560. The first white comers found the Cherokee Indians occupying the land. These Indians lived in permanent villages and grew corn, pumpkins, and other crops, not depending entirely upon the chase for a livelihood. Their capital, Echota, was located near the site of the present town of Tellico Plains, within the boundaries of the Cherokee National Forest.

For many years prior to the French and Indian wars, most of the region was under nominal control of the French. Fort Loudon, whose ruins may still be seen at the junction of the Tellico and Little Tennessee Rivers, was the most western outpost of English civilization on the American Continent. It was built by the British in 1756 and captured and its garrison massacred by the French and Cherokees in 1760.

It is probable that the first English—Indian traders from Virginia—entered the region about 1730. The southern mountains were settled by pioneers sifting down the valleys from western Pennsylvania rather than across the forbidding ramparts of the Blue Ridge. Most of these early comers were Scotch and Irish, the stock that developed such men as Daniel Boone, John Sevier, Davy Crockett, Sam Houston, and Abraham Lincoln. As the colonists pressed more and more strongly south and west through the mountain valleys, the resistance of the Cherokees stiffened until the border was ablaze with warfare. In 1776, punitive expeditions penetrating deeply into the wilderness burned over 30 Indian towns, and so weakened the Cherokee Nation that the Indian menace was ended.

The record of the white man's dealings with the Cherokees for the 60 years following 1776 is not pleasant. Valley by valley, range by range, the Indians reluctantly gave up their homeland. Finally, in 1838, the Cherokee Nation was moved west to lands in Indian Territory. Many perished en route; all looked back with longing eyes to the beautiful country they were leaving. Some of them evaded migration by hiding in the most inaccessible recesses of the mountains; others escaped en route and found their way back. Eventually these Indians and their descendants came to be known as the Eastern Band of the Cherokees. Most of them live today on the Qualla Indian Reservation in western North Carolina.



F-15480A

An old-time mountain cabin with hand-hewn log walls and a split shake roof.

where they have retained their language and many of their customs and traditions.

The lands of the dispossessed Cherokees were ceded by the States to white settlers. Gradually the rich valleys and bottomlands were placed under cultivation. Later comers tucked their little cabins of squared logs high on the slopes and in upland coves, sometimes farming land as steep as the slope of a roof, and land originally rich was soon so badly eroded that the formerly clear streams ran red with mud. Such land could not continue to yield a decent living from farming and infinitely better might have been left in forest to protect streamflow and yield successive crops of forest products.

The Forest Cover



THE FORESTS of the southern Appalachians have a great diversity of species. On a 30-mile trip from Marion, N. C., to the top of Mount Mitchell a traveler encounters more species of trees than he would in crossing Europe from the British isles to Turkey. He passes from the yellow pines, oaks, and hickories of the Piedmont through zones of white pine, hemlock, yellow poplar, oaks, and other hardwoods typical of the rich mountain coves and lower slopes; to high valleys and cool north slopes where grow buckeye, black cherry, sugar maple, beech, and birch; until finally he ascends to the dense forests crowning the highest peaks, whose spruce and balsam are suggestive of Canada. Since colonial times these southern mountains have been a Mecca for botanists, and they will be forever associated with the names of Bartram,

Michaux, Asa Gray, Sargent, and Ashe, all of whom explored them.

It is probable that the first white men found an almost unbroken forest mantle covering the mountains. The only open spots were the natural grassy clearings, known as "Balds," on top of many of the mountains about a mile above the sea. Treeless, though anything but bare, are the rhododendron "slicks" or "hells" on some of the higher slopes, matted thickets so dense that only a bear can penetrate them.

Varied as are the trees, the diversity of the shrubs, vines, flowering herbs, and ferns is greater. Most famous are the rhododendrons, laurels, and azaleas, which here find their maximum development on the American Continent. Of the rhododendrons, the two most striking are rosebay rhododendron (*Rhododendron maximum*) which often reaches tree dimensions and is sometimes white-flowered, and the purple rhododendron (*R. catawbiense*) which occurs on mountain summits. Of the many azaleas, the most famous is the flame azalea (*Azalea calendulacea*) whose flowers range from lemon yellow to flame red and whose brilliance lights up all the upland forests in May and June.

From early April, when the pink of the redbud and the white of the dogwood, shadbush, and silverbell begin the floral display, through May, when yellow poplar, mountain laurel, mountain magnolia and buckeye, wild crabs and haws, and countless kinds of wild flowers bloom; into June and July, with their rhododendrons and azaleas; all through the summer and late into the fall when wild asters,

gentians, and other late-blooming species are at their best, there is never a dull moment for the flower lover.

The second great burst of color in the mountain forests comes with the frosts of late October. Then the ruby of the sourwood and gum, the crimson of the sumac, the oak leaves turned the color of ripe old port, the lemon yellow of the beech and poplar, the rich gold of the hickories, the orange of the sassafras, and the old rose of the dogwood are accentuated by the dark blue green of the pines and hemlocks, while over all the mountains hangs the blue haze of Indian summer.



F-198282

In mid-June purple rhododendron is in bloom.



F 386651

In the Joyce Kilmer Memorial Forest: "A tree whose hungry mouth is pressed against the earth's sweet flowing breast."

Why National Forests?



THE SOUTHERN APPALACHIAN region was too rough, too far from markets, to tempt the lumbermen until, in the closing decades of the nineteenth century, railroads began to penetrate the mountains and a few of the more valuable timber species came to have more than a local demand. In the years that followed logging railroads pierced deep into the forests, great sawmills sprang up, and exploitation of the

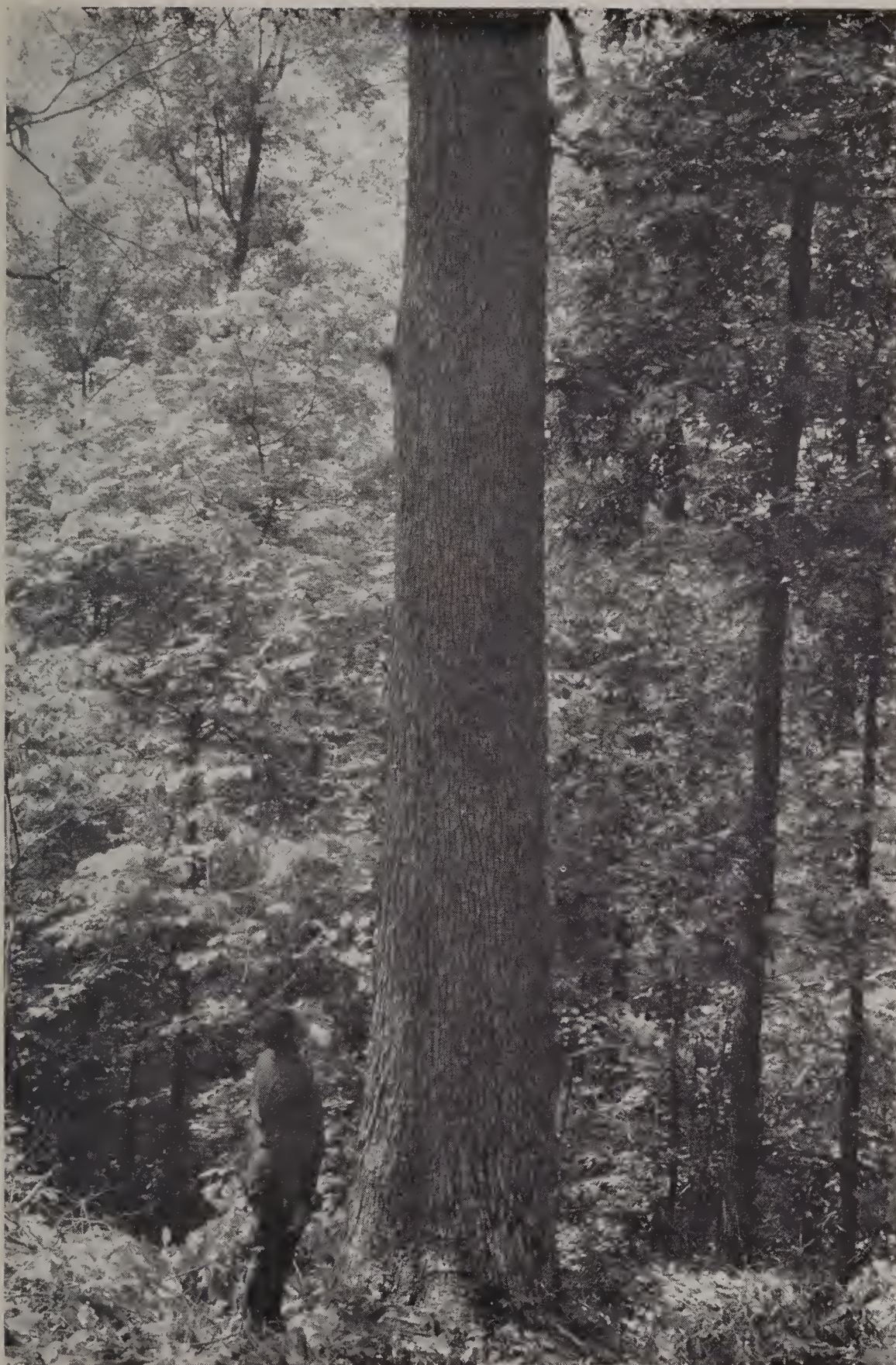
timber went on apace with no thought of renewal, no idea of treating timber as a crop. And in the wake of lumbering operations came forest fires, great roaring conflagrations feeding on the debris left from lumbering, destroying mature timber and young growth as well, sometimes even burning down through the humus and soil to bare rock.

Congress in 1911 took the first step toward safeguarding the beauty and usefulness of the southern Appalachian forests by passing the Weeks law, authorizing, through the Forest Service of the Department of Agriculture, Government purchases of lands for the protection of the headwaters of navigable streams. Supplementing this, the Clarke-McNary law of 1924 made possible acquisition of denuded lands and worn-out farms for timber producing purposes. Funds made available by these laws and later by emergency legislation have enabled the Forest Service, by purchases carried on steadily over a period of 27 years, to round out the five national forests in the southern Appalachians.

These national forests are much more than mere timber preserves. While it is true that they produce a wide variety of saw timber and other valuable forest products, other uses of the forests are equally important. In this great southern upland are born rivers that water the plains and provide sources of electric energy. Lands controlled by the Forest Service are never clear cut. Sufficient seed trees and young growth are always left to protect the steep mountain slopes against erosion and provide leaves and litter which serve as a sponge to hold the heavy rainfall and thus help prevent destructive floods and periods of low water.

Forests provide food, shelter, and proper habitat for wildlife, including song and game birds, deer, bear and smaller furred creatures, and such game fish as trout and bass.

The importance of forests for outdoor recreation cannot be overestimated, and here, as is true in the case of wildlife, recreational use need not materially con-



F-221399

When this mature white oak is cut, young growth will take its place



F-3866-3

Conservative forest utilization: Mature yellow poplar and oak logs from a Government timber sale on the Chattahoochee National Forest.

flict with other forestry objectives. Grazing, though not so important here as on many of the western national forests, is another of the multiple uses of forest land.

Finally, these southern mountain national forests serve as outdoor laboratories where problems whose solutions will benefit private landowners may be worked out, and as areas demonstrating the results of proper land and timber management. Students of several schools of forestry also pursue field work in these forests.

*IF YOU DON'T KNOW—ASK THE FOREST
RANGER*

Administration and Protection



THE UNITED STATES FOREST SERVICE has under its jurisdiction 161 national forests, with a net area of more than 175,000,000 acres. General headquarters are in Washington, D. C. For administrative purposes the country has been divided into 10 regions, each headed by a regional forester and staff. Region 8, with headquarters at Atlanta, Ga., includes southeastern United States and Puerto Rico, with 26 national forests. Forest supervisors are in charge of the national forests, which are divided into ranger districts, each with a district ranger and assistants. Asheville, N. C., is headquarters for the Appalachian Forest Experiment Station, whose staff

carries on research in the nearby national forests.

The Government has been able to buy some sizable holdings of virgin timber to be included in the southern Appalachian forests. Other tracts, selectively logged, when purchased still contained considerable growing stock.

The first essential to proper forest management is, of course, protection against fire. If fires rage unchecked, timber, streamflow and water supplies, wildlife, grazing, recreation, all suffer. Funds for development of the forest lands were limited during the early years, and efforts were naturally directed largely toward building up fire-protection organizations and facilities. Much of the acquired land remained inaccessible and undeveloped, however, until the creation of the Civilian Conservation Corps in 1933, which made money and manpower available to build roads and trails, additional lookout towers and telephone lines, workshops and equipment depots, to carry on timber-stand-improvement work, and to initiate many developments which were previously impossible.

Before the national forests in the southern Appalachians were established, 30 to 50 percent of their area burned over annually. Within 10 years the Forest Service had cut these annual losses down to 3 percent. Today they are less than one-tenth of 1 percent. Moreover, the development of highways and forest roads has made possible the profitable logging of inferior species in previously culled stands. Even the worst of the denuded and burned-over areas



F-386658

A modern ranger station built with the aid of the C. C. C. on the Chattahoochee National Forest.



F-261442

This lookout tower on Round Mountain in the Sumter National Forest is a unit in the system of fire protection.

are responding to protection and will someday again become productive forests.

Since nearly all forest fires are man-caused, the cooperation of the public will go far toward ending the red menace. A good woodsman will be careful with fire, will never leave his campfire without completely extinguishing it, will never build a fire in inflammable forest floor debris, and will not throw away lighted matches, cigarettes, cigars, or pipe heels. If he finds a forest fire, he will put it out if he can. If he cannot put it out, he will report it to the forest supervisor, the ranger, the sheriff, or the nearest telephone operator. Locations of the headquarters of the supervisors of the Appalachian forests and the rangers are indicated on the map

The Forest Service has built many lookout towers on strategically located mountain tops. These towers are connected with one another and with headquarters by telephone or radio, and the tower men usually spot a fire within a few minutes after it starts. Since the first hour is the critical one in fighting fires, roads and trails have been built through the forests so that crews equipped with fire-fighting tools can be immediately rushed to the danger points. Visitors are always welcome at the lookout towers, where they may see the fire-detecting apparatus and enjoy splendid views of the surrounding mountains. All lookout towers on the national forests of the southern Appalachians are indicated by a special symbol on the map which accompanies this booklet.

In addition to administration, protection, and development of the national forests, the Forest Service cooperates with States and private owners in protection from fire and reforestation of privately owned forest land and assists forest owners in developing better forest management.

*THE FOREST YIELDS HEALTH—WEALTH—
SECURITY*



*EVERYBODY LOSES WHEN TIMBER BURNS
BE SURE YOUR FIRE IS OUT—DEAD OUT*

Benefits To Communities



ALL PROCEEDS from the sale of timber and from other sources on the national forests are deposited in the Treasury of the United States. Twenty-five percent of the earnings of the forests is returned to the counties in which the forests are located for the benefit of public roads and schools, and an additional 10 percent is expended by the Forest Service for the construction and maintenance of roads within the forests.

This direct monetary return is, however, only a part of the benefit that communities receive from national forests in their vicinity. The development and protection of the forests afford many thousands of man-days of labor annually, paid for by the Federal Government, and marketing the products of the forests provides a livelihood for many people.

Other benefits, more difficult to evaluate in terms of money, are nevertheless of great importance. The reservoirs which store water for power production and



F-176370

Balanced agriculture and forestry: Farms and villages in the fertile valleys are surrounded by tree-clad mountains.

other purposes would silt up and become useless were it not for the protection the mountain slopes receive from the forests. Each year increasing thousands of visitors flock to the southern Appalachians, attracted by the scenery and the opportunities to hunt and fish and enjoy woodland forms of recreation. Visitors to the forests bring a very considerable revenue to the mountain communities.

The Forest Service helps promote the permanence of communities near the national forests. Since only the annual growth of the forests is harvested, there is no depletion of forest capital and consequently no danger of industries that depend on the products of the forest facing exhaustion of raw materials. This makes for stability. It is also the policy of the Forest Service to build up forces of local workers and by providing them with part-time employment during slack periods to help them augment their earnings from farming or other sources.

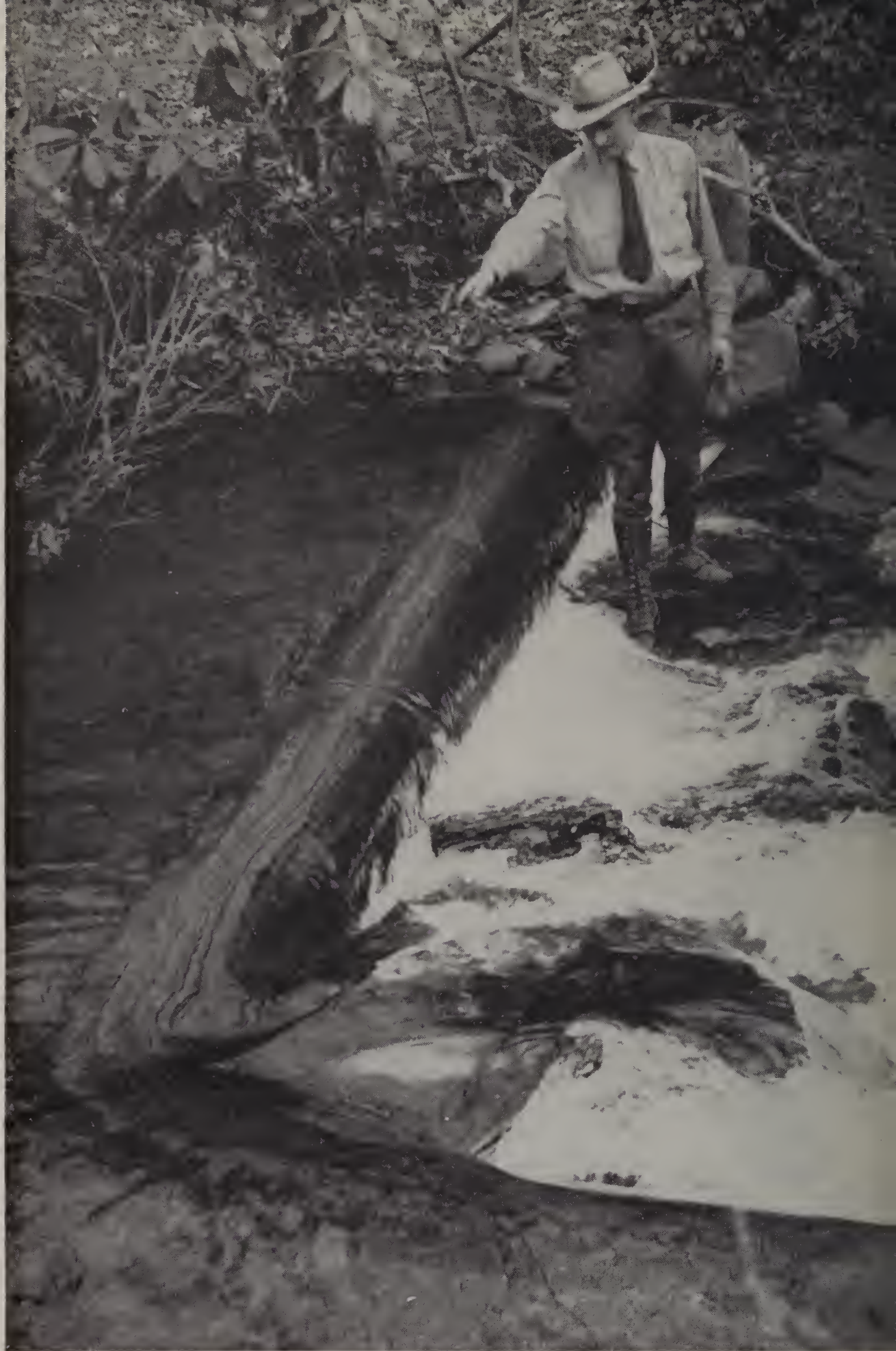
Wildlife and Its Management

AS IS THE CASE with trees and other vegetation, the southern Appalachians have a great variety of wildlife. There are nearly 200 kinds of birds, those of interest to the sportsman including duck, rail, woodcock, snipe, plover, quail, wild turkey, ruffed grouse, and doves. Among the mammals native to the region are the opossum, black bear, raccoon, marten, weasel, mink, otter, skunk, wildcat, red and gray fox, woodchuck or groundhog, chipmunk, beaver, cottontail rabbit, Virginia or white-tail deer, and red, gray, fox, and flying squirrels. Fish include the following game or food species: brook or speckled trout, rainbow trout, brown trout, large and small mouth black bass, rock bass, bream, muskellunge, pickerel, and catfish. Many of the cold and rushing mountain streams are famous for their trout fishing.



From the wildlife, originally so abundant in the southern mountains, the Cherokees and the pioneers who succeeded them derived a large part of their sustenance. Gradually, however, with increases in population, lumbering, the prevalence of forest fires, and incessant hunting in season and out, this wealth of wildlife dwindled until some species were at the verge of extinction. With the protection against fire afforded by the Forest Service, more rigid and better enforced game laws, and an awakening of enlightened public opinion, conditions are now improving and game is on the increase.

As wildlife is one of the renewable natural resources of the national forests,



Stream-improvement dams create deep pools and fast water where trout love to stay.

wildlife management is an integral part of the multiple-use plan of forest administration. Because of posted land, leasing of hunting and fishing rights on large areas of private land by hunting clubs, and the purchase of hunting preserves by clubs and wealthy individuals, areas where the average non-landowning citizen can hunt and fish are becoming scarcer. The national forests will always be available, under regulated management, as hunting and fishing grounds for the general public.



F-386652

At the fawn farm on the Pisgah National Forest hundreds of young deer are reared as part of the program of restocking the national forests with wildlife.

On the national forests in the southern mountains, wildlife management areas have been developed by the Forest Service in cooperation with the State fish and game authorities. On these areas hunting and fishing are permitted under such restrictions that the annual kill will not exceed the annual increase, and the stock of wildlife is being built up. The revenue from the sale of hunting and fishing permits is used to finance wildlife activities within the areas, such as protection, predator control, and restocking. Since open seasons, bag limits, and other hunting and fishing restrictions vary from year to year, current information may best be obtained directly from the forest supervisors or State game officials.

Recreation Use and Development



STRATEGICALLY located as they are close to the South Atlantic and Gulf coast lowlands, it is little wonder that the southern Appalachians are a Mecca for vacationists. Within a radius of 200 miles, an easy 1-day motor trip, live some 13,000,000 people.

To take care of the increasing number of visitors, the Forest Service has developed a network of scenic roads and trails and a large number of recreation areas. These recreation grounds provide picnic areas equipped with shelters, rustic tables and benches, fireplaces, means for garbage disposal, modern sanitary facilities, and tested drinking water. In connection with many of them, areas have been arranged for both tent and trailer



F-386655

A secluded picnic nook on a national forest recreation area.

camping. Water sports are very popular in the region, and many small lakes have been created for recreation purposes and bathing facilities provided beside existing lakes and along rivers.

Adhering to the principle of the greatest good to the greatest number, the Forest Service gives first priority to development of picnic and campgrounds and sports areas for the general public. Next in priority are organization camps where mass recreation may be enjoyed by Boy and Girl Scouts, 4-H Clubs, other semi-public organizations, and groups of underprivileged children. These organization camps include sleeping, cooking, and dining quarters, sanitary facilities, recreation halls, and play fields. They are leased to organizations at moderate rates and are very much in demand.

Lower in priority, because of exclusive use by a limited number of people, are sites for summer homes. These are laid out on spur roads where privacy may be assured and are leased at reasonable annual rentals.

Forest Roads and Trails

THE GREATER part of the territory included in the southern Appalachians is well served by railroads and a network of motor roads. These roads are of two types. Concrete or asphalt national and State highways link the principal towns together and radiate out to all parts of the United States. While most of these highways keep to the valleys, portions of them necessarily cross the mountain ranges and are notably scenic.

Leading from the highways and penetrating deep into the national forests are hundreds of miles of secondary roads constructed and maintained by the Forest Service. Although these roads are not as wide as the highways and have steeper grades and sharper curves, motor travel over them at reasonable rates of speed is perfectly safe. From them countless vistas, glimpses of waterfalls, wooded valleys, and mountain panoramas may be enjoyed.

The southern Appalachian forests afford many opportunities for mountain hiking. The Appalachian Trail, that famous 2,000-mile footpath which follows the mountains from Mount Katahdin in Maine to Mount Oglethorpe in Georgia, traverses some of the most scenic portions of the Cherokee, Pisgah, Nantahala, and Chattahoochee National Forests. Along it at intervals are open-face, Adirondack-type shelters. A detailed description of this trail from Virginia



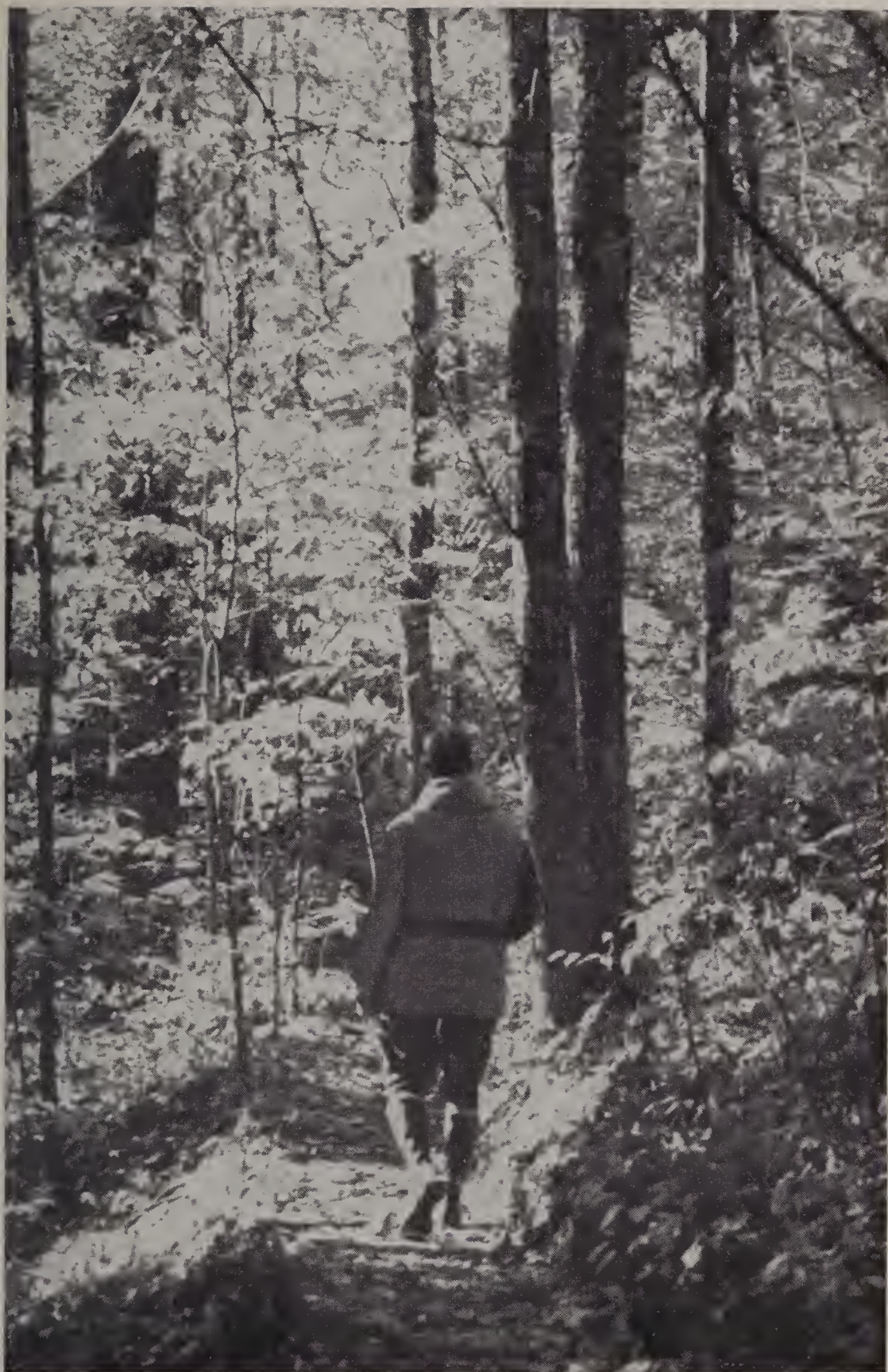
south is given in the "Guide to the Southern Appalachians" issued by the Appalachians Trail Conference, 901 Union Trust Building, Washington, D. C.

Many other interesting trails traverse these national forests. Some of them are adapted to horseback riding, others are footpaths leading to scenic spots inaccessible by motor. Nature trails have been developed in connection with some of the recreation areas and are very popular. Along them the many varieties of trees and much of the smaller vegetation have been permanently labeled with their common and scientific names, range, and uses.



F-386656

Modern highways have opened up the beauties of the national forests to thousands of visitors. This is U S 64.



F-386646

Intimate woodland trails tempt hikers deep into the national forests.

Cherokee National Forest



LOCATION AND DESCRIPTION—This forest, except for 327 acres in North Carolina, lies entirely in Tennessee in a long narrow strip joining North Carolina, the Great Smoky Mountains National Park separating it into two divisions. Forest supervisor headquarters are at Cleveland, Tenn. Ranger headquarters are at Cleveland, Tellico Plains, Greeneville, and Bristol.

The southern division is separated from the agricultural lands of the Great Valley of Tennessee by a steep escarpment, behind which jumbled mountains rise to the mile-high Unicoi Range on the Tennessee-North Carolina line. Portions of the forest bear good merchantable timber, but large areas were logged over years ago and now support excellent young growth. The northern section of the forest is characterized by long parallel ranges between which lie agricultural valleys.

Noteworthy features of the forest include the Ducktown copper mining section, Parksville Lake on the Ocoee River, Bullet, Greasy Creek, Bald River, and Tellico River Falls, the John Sevier house and Indian mounds near Tellico Plains, the area of virgin timber on Falls Branch near Hemlock lookout tower, and the ruins of old Fort Loudon just north of the forest boundary. Other special points of interest include Roan High Knob, elevation 6,300 feet, Beauty Spot, and the gorges of the Nolichucky, Doe, and Watauga Rivers.

The Cherokee National Forest has a gross area of 1,204,327 acres, of which 535,656 acres have so far been purchased or approved for purchase. It is estimated that there are on Government land some 600 million feet of merchantable timber composed of pine, hemlock, oaks, yellow poplar, and other hardwoods. There are also 300 million feet of blight-killed or damaged chestnut which is being salvaged as rapidly as economic conditions permit. The present annual growth is 15 million board feet.

HUNTING AND FISHING.—Hunting and fishing are excellent on this forest, especially in the southern division. In the 10,096-acre Big Frog Federal Game Refuge, no hunting is permitted, but the refuge serves as a feeder for the 18,832-acre Ocoee Wildlife Management Area which surrounds it. Here, as in the 79,821-acre Tellico Fish and Game Management Area, deer, bear, turkey, and small game are increasing, and the fishing has greatly improved with the planting of thousands of rainbow trout. A unique feature of the Tellico area is hunting for Prus-

sian wild boar. In three annual hunts 54 of these vicious fighters have been killed. A fish rearing station at Pheasant Fields supplies trout to stock the streams of this forest.

In the northern division, the Andrew Johnson State Game Refuge of 9,000 acres has been stocked with deer, its streams are well stocked with rainbow trout, and grouse, squirrels, and fur bearers are plentiful. The Laurel Fork area of 5,000 acres contains no deer as yet, but has been stocked with wild turkey and grouse. Other kinds of small game are plentiful.

RECREATION.—The Cherokee National Forest is a favored vacation land for people from the cities and towns to the west and north. The Forest Service has developed a number of recreation areas, including the following:

Lake Chilhowee.—On Beans Mountain near Benton. Bathing in a 7-acre lake, picnicking, camping.

Quinn Springs.—On Tennessee Route 40, 1 mile east of U S 411. Picnic grounds and camping area.

Kimsey Highway.—Near Sassafras lookout tower. Picnicking.



F-38665 1

Tumbling water and fighting trout. Bald River Falls in the Cherokee National Forest.

Bald River Falls.—On the scenic Tellico River Road 10 miles east of Tellico Plains. Bathing, picnicking, camping.

Dam Creek.—Eight miles up the river from Bald River Falls. Bathing, picnicking, camping

Sycamore Creek.—Eighteen miles up the river from Tellico Plains. Sites for summer homes.

Round Knob.—Sixteen miles from Greeneville. Picnicking.

Horse Creek.—Twelve miles from Greeneville. Swimming, picnicking, and camping.

The Laurels.—A very popular picnic area in a grove of white pines and hemlocks 8 miles from Johnson City.

Dennis Cove.—Twelve miles from Elizabethton. Picnicking, camping, and bathing.

Backbone Rock.—Three miles south of Damascus, Va., where the Beaverdam Road tunnels through a peculiar geologic dike. Popular for picnicking, swimming, and sightseeing.

Beaverdam.—One-third mile north of Backbone Rock, providing picnicking, camping, and bathing.

ROADS AND TRAILS.—Among the roads suggested for recreational motor travel are the following:

The road from Tellico Plains up Tellico River to Stratton Meadows on the crest of the Unicoi Range.

The Kimsey Highway from Reliance across Little Frog Mountain, with interesting views of the Ducktown Basin.

Tennessee Route 68 from Ducktown crossing the Hiwassee River and winding through the mountains to Tellico Plains.

U S 64 from Cleveland passing Parksville Lake and following up the gorge of the Ocoee River to Ducktown.

U S 25 and 70 from Newport following up the French Broad River via Hot Springs and Marshall to Asheville.

U S 421 from Bristol crossing the Holston and Iron Mountains to Mountain City.

U S 19-W from Erwin through wild mountains to Asheville.

Unaka Mountain Road loop from Erwin passing Rock Creek recreation area to Beauty Spot on the mountain top.

Tennessee Route 91 from Elizabethton up the valley between the Holston and Iron Mountains to Shady Valley.

Of the numerous foot trails the following are listed in addition to the Appalachian Trail:

Peavine Trail to the top of Big Frog Mountain.

Rock Creek Trail to the top of Beans Mountain.

Oswald Dome Trail from Quinn Springs to Oswald Dome lookout tower.

Bald River Trail following an old logging road up Bald River from Bald River Falls into one of the wildest areas in the forest.

Pisgah National Forest



LOCATION AND DESCRIPTION.—This forest lies entirely in North Carolina, with the forest supervisor headquarters at Asheville. It is divided into four ranger districts.

The Pisgah ranger district lies southwest of Asheville, with headquarters at Pisgah Forest near Brevard. It is bordered on the west by the high and rugged Tennessee Ridge

and Balsam Mountains, many of whose peaks are over 6,000 feet high. Trending northeast through the ranger district is Pisgah Ledge, whose most prominent peak is Mount Pisgah, a notable landmark visible for miles in every direction. The mountain streams in this section are exceptionally clear and pure and are broken by many waterfalls. Other features of interest are such rounded granite domes as Lookingglass Rock, Cedar Rock, and John Rock, the great expanses of laurel and azalea, known as the Pink Beds, and the Bent Creek Experimental Forest.

The French Broad ranger district, with headquarters at Hot Springs, adjoins the Great Smoky Mountains National Park on the west. It is characterized by narrow valleys and steep wooded slopes running up to rounded plateaus.

East of Asheville, with ranger headquarters at Marion, is the Mount Mitchell ranger district. This section is distinctly rugged in character, with its dominating peak Mount Mitchell, elevation 6,684 feet, the highest point of land east of the Mississippi River. Near Mount Mitchell may still be found areas of virgin red spruce, a part of which has been permanently preserved from lumbering under the designation of the Black Mountain Natural Area. Other points of interest include Craggy Gardens, Toms Creek and Crabtree Falls, and the Mount Mitchell Game Exhibition Farm.

The Grandfather ranger district, with headquarters at Lenoir, occupies a wild, ravine-cut country south of Grandfather Mountain, the highest peak in the Blue Ridge. Its outstanding feature is famous Linville Gorge with Linville Falls at its head.

The gross area of the Pisgah National Forest is 1,178,000 acres, of which 454,560 acres have been acquired by the Government or approved for purchase. The present stand of merchantable timber on Government land is about 500 million board-feet.

HUNTING AND FISHING.—This forest affords some of the best hunting and fishing in eastern United States.

On the Pisgah ranger district is located the 100,000-acre Pisgah National Game Preserve, where regulated trout fishing and deer, bear, and squirrel hunting are available. This preserve has been under wildlife management since 1916 and has a highly concentrated stocking of deer. Young fawns found in the thickets by trained searchers in late spring are raised at the unique fawn farm near the Pink Beds for distribution to other regions where the stock of deer has been depleted,



F-51017

Linville Falls at the head of Linville Gorge in the Pisgah National Forest.

and surplus adult deer are humanely trapped and shipped to other forests to be released. At the head of Davidson River there is a trout rearing station, from which 5- to 8-inch trout are transported in large quantities to restock mountain streams throughout the forest.

Also on the Pisgah ranger district, in the high cool spruce country at the head of Pigeon River, is the Sherwood Wildlife Management Area of 31,000 acres, man-

aged in cooperation with the State of North Carolina. Here is some of the best brook trout fishing in the southern mountains, as well as grouse and bear hunting.

At the head of South Toe River in the Mount Mitchell ranger district is the cooperatively managed Mount Mitchell Wildlife Management Area of 25,000 acres, where there are excellent fishing for brook and rainbow trout, and grouse, squirrel, and bear hunting. Deer and turkey hunting will be permitted as soon as the stock of these species of game warrants it.

In the Grandfather ranger district is the Boone Wildlife Management Area of 40,000 acres, including some of Daniel Boone's old hunting grounds. Fishing for brook and rainbow trout is at present good and will improve as the streams become more fully stocked. Grouse and squirrel abound, bear are becoming increasingly common, and the stock of deer and turkey is increasing.

RECREATION.—The Pisgah National Forest, renowned for its scenery and easily accessible to such vacation centers as Asheville and surrounding towns, attracts increasing multitudes of visitors each year. Recreation areas developed by the Forest Service include:

North Mills River.—Five miles up North Mills River from N. C. Route 191. Picnicking, bathing, tent and trailer camping areas, council ring, children's playgrounds.

Stony Fork.—On the Pisgah Motor Road 18 miles from Asheville. Camping and picnicking facilities.

Bent Creek.—On Bent Creek 3 miles from N. C. Route 191. Camping and picnicking.

Frying Pan Gap.—A mile above the sea on top of Pisgah Ledge, 27 miles from Asheville. Camping and picnicking.

Pink Beds.—A picnic area on N. C. Route 284.

White Pines.—Near N. C. Route 284, 3 miles from forest entrance. Picnic and camping facilities.

Davidson River.—Beside Davidson River near N. C. Route 284. Picnicking and swimming.

Carolina Hemlocks.—On South Toe River 7 miles from Micaville via N. C. Route 104. Picnicking, swimming, council ring, facilities for tent and trailer camping.

Old Fort.—Beside U S 70, 2 miles west of Old Fort. Picnicking and hiking.

Craggy Gardens.—At end of Craggy Gardens Road 11 miles from Barnardsville. Picnic facilities. Scenic trail leads to spectacular mile-high rhododendron gardens. Blossoming season mid-June.

Big Ivy.—On Corner Rock Road 5 miles from Barnardsville. Affords picnicking, camping, and swimming.

Silvermine.—Located just off U S 25 across French Broad River from Hot Springs. Picnicking, swimming, hiking, and limited camping facilities.

Table Rock.—At end of Table Rock Road, 20 miles from Morganton via N. C. Route 181. Picnicking and hiking, exceptional scenery.

South Toe Organization Camp.—On South Toe River Road 3 miles from N. C. Route 104 at Busick. Camping facilities for organizations.

The following resorts operate under permit on Government land:

Pisgah National Forest Inn.—On Pisgah Ledge beside Pisgah Motor Road, 25 miles from Asheville. Lodging and meals.



F-386653

Mount Pisgah, elevation 5,749 feet, from the Pisgah Motor Road, from which a trail leads to the summit.

Pisgah Parking Area.—On Pisgah Ledge, 24 miles from Asheville via Pisgah Motor Road. Trail to top of Mount Pisgah. Meals, soft drinks, and novelties.

Point Lookout.—On U S 70, 15 miles east of Asheville. Lodging, meals, and novelties.

Camp Alice.—Near the crest of Mount Mitchell. Meals and lodging.

ROADS AND TRAILS.—In addition to over 100 miles of State and National high-

ways which cross the Pisgah National Forest, there are some 300 miles of forest roads, most of which are open to the public nearly all year. A few of the many scenic routes and loops through the forest are:

From Asheville.—Via U S 19–23, N. C. Route 191, N. C. Route 280, N. C. Route 284, Pisgah Motor Road, and U S 19–23, including Davidson River, Lookingglass Falls, Fawn Farm, Pisgah Inn, and Mount Pisgah. Distance 85 miles.

From Asheville.—Via U S 19, U S 19–E, N. C. Route 104, and U S 70, including Burnsville, Carolina Hemlocks campground, Buck Creek Gap, and Lake Tahoma. This trip encircles the Black Mountain Range and affords fine views of Mount Mitchell. Distance 100 miles.

From Asheville.—Via U S 19, U S 19–E, N. C. Route 194, U S 221, U S 321, N. C. Route 18, and U S 70, including Burnsville, Linville, Grandfather Mountain, Blowing Rock, Lenoir, Morganton, and Marion. Distance 230 miles.

From Marion.—Via U S 70, Curtis Creek Road, Neals Gap Road, N. C. Route 104, U S 19–E, N. C. Route 26, U S 221, and U S 70, including Big Laurel Gap, Mount Mitchell Game Exhibition Farm, Carolina Hemlocks campground, Spruce Pine, and Little Switzerland. Distance 70 miles.

From Brevard.—Via U S 64, North Fork French Broad River Road, Gloster Road, Davidson River Road, and N. C. Route 284, including Rosman, Balsam Grove, fish rearing station, Lookingglass Rock, and John Rock. Distance 45 miles.

From Lenoir.—Via N. C. Route 18, U S 221, and U S 321, including Morganton, Linville, Grandfather Mountain, and Blowing Rock, most of the route affording majestic views of the Grandfather district. Distance 75 miles.

There are some 550 miles of graded trails in the forest. In addition to the Appalachian Trail, following is a partial list of trails to scenic and interesting points:

Craggy Mountain Trail from Craggy Gardens to Little Cane River Gap, via Balsam Gap. 18 miles.

Higgins Bald Trail from Busick to Mount Mitchell. Distance 5 miles.

Camprock Trail from Loftis Cabin to Mount Mitchell. Distance 5 miles.

Harper Creek Trail from Kawana to Mortimer-Piedmont Road, via Harper Creek Falls. Distance 4 miles.

Mount Pisgah Trail from Pisgah parking area to top of Mount Pisgah. Distance $1\frac{1}{4}$ miles.

Pisgah Ridge Trail from Wagon Road Gap to Tennessee Bald. Distance 18 miles.

Bent Creek Horse Trails. A network of 100 miles of trails and old woods roads, in the Bent Creek section, for equestrian use.

Blowing Rock-Thunder Hole Horse Trail. Distance 7 miles.

Nantahala National Forest



LOCATION AND DESCRIPTION.—This forest is also located in North Carolina. The forest supervisor headquarters are at Franklin while the district rangers in charge of the three ranger districts are located at Franklin Murphy, and Andrews. Although most of the area in this forest is not as rough and precipitous as some other portions of the southern Appalachians, its rounded mountains have a special beauty of their own and afford unexcelled views.

Scenic attractions include:

In the Franklin-Highlands section: Cullasaja Falls, Cullasaja Gorge, Dry Falls, Bridal Veil Falls, Lake Sequoyah, and Whiteside Mountain.

West of Franklin: Standing Indian Mountain with its fine views and displays of purple rhododendron, Wayah Bald noted for its views and for azaleas, Nantahala River, Queens Creek Falls, Winding Stair Road, and Nantahala Gorge.

In the Andrews-Robbinsville section: Lake Santeetlah and the Joyce Kilmer Memorial Forest. This Memorial Forest, dedicated to the author of the poem "Trees," includes 3,800 acres of exceptional virgin hardwood timber preserved in its primeval condition and should by all means be visited. It is accessible by Forest Service roads from Robbinsville.

Near Murphy: The Hiwassee Dam developed by the Tennessee Valley Authority.

The gross area of the Nantahala National Forest is 1,349,000 acres, of which 325,930 acres have been acquired or are in process of being bought by the Government. The present stand of merchantable timber on Government land is about 600 million board-feet. On the Coweeta Experimental Forest south of Franklin important streamflow experiments are in progress.

HUNTING AND FISHING.—The Nantahala country was once a favorite Cherokee hunting ground. All kinds of game were abundant, and the mountain streams teemed with trout. In more recent years, however, the supply of game and fish has become depleted. No finer potential trout streams can be found than the Nantahala River and its tributaries and the streams that flow east from the high Unicoi Range; food and shelter for deer and other game are also available. With protection and judicious restocking, excellent hunting and fishing will result.

There are three cooperative wildlife management areas on the Nantahala



F-198301

Dry falls on the Cullasaja River in the Nantahala National Forest.

National Forest: The 15,000-acre Fires Creek area north of Hayesville, the 9,000 acre Wayah Bald Game Refuge west of Franklin, and the 33,000-acre Standing Indian Area at the head of the Nantahala River. Trout fishing during certain limited seasons and under special regulations is permitted on these areas, and opportunities for hunting will be available when the depleted stock of game has been replenished.

At Arrowood Glade, 7 miles west of Franklin, rearing pools have been developed



F-386657

The Nantahala Gorge: The "Place of the noonday sun" on U S 19.

with an annual capacity of 60,000 young trout which attain in 6 months a length of 7 inches and are then planted in the forest streams.

RECREATION.—The portion of western North Carolina in which the Nantahala National Forest is located has long been popular with summer visitors. The section's attractions have been greatly enhanced by scenic roads and trails, picnic

and sports areas, and other facilities for recreation constructed by the Forest Service.

Improved recreation areas in this forest include:

Arrowood Glade.—Seven miles west of Franklin by U S 64 and the Franklin-Nantahala Forest Road. Bathing, picnicking, and an arboretum.

Wayah Crest.—Six miles west of Arrowood Glade at Wayah Gap in the Nantahala Range. Overnight lean-to and picnic facilities.

Wayah Bald.—The John B. Byrne Memorial Tower affords views into four States. Azalea blossoming season June and early July.

Deep Gap.—Seven miles by forest road south of U S 64 near Rainbow Springs. Picnicking and camping 4,500 feet above sea level. From Deep Gap the Appalachian Trail leads to the top of Standing Indian Mountain.

Gorge Dell.—A small picnic area on U S 19 in the Nantahala Gorge.

Vanhook Glade.—On U S 64 in the Cullasaja Gorge, 15 miles from Franklin. Trailer and tent camp sites.

Cliffside Lake.—On forest road 2 miles north of Vanhook Glade. Picnicking, bathing in 6-acre lake.

Ammons Campground.—A picnic area 3 miles southeast of Highlands.

ROADS AND TRAILS.—The Nantahala National Forest is well served by a network of highways and forest roads, many of which are of high scenic quality. Among these may be listed:

U S 64 from Franklin via the Cullasaja Gorge, Highlands, and continuing east to Rosman. The same route west from Franklin, crossing the Nantahala Mountains to Hayesville and Murphy.

U S 19 from Murphy via Andrews, Topton, the Nantahala Gorge, and Balsam Gap to Asheville.

U S 129 from Topton via Robbinsville and Lake Santeetlah to Tapoca.

U S 23 from Franklin across the Cowee Mountains to U S 19 at Dillsboro.

N. C. Route 106 down the Tuckasegee River.

N. C. Route 286 from Franklin down the Little Tennessee River.

The Forest Service road from U S 64, 4 miles west of Franklin across the Nantahala Mountains and via the Winding Stair Road to U S 19, in the Nantahala Gorge.

The Forest Service road down the Nantahala River from U S 64 at Rainbow Springs.

The Forest Service road across the Tusquitee Mountains via Tuni Gap.

The Forest Service road from Dillard, Ga., to Highlands.

The Forest Service road from Andrews across the Snowbird Mountains to Robbinsville and continuing via the western shores of Lake Santeetlah to a junction with U S 129.

The Appalachian Trail which enters the forest near the Tennessee line and traverses the entire length of the Nantahala Mountains is outstandingly scenic. Another interesting trail leads through the Joyce Kilmer Memorial Forest to Hangover Mountain and encircles the watershed of Little Santeetlah Creek via Stratton Bald.

Chattahoochee National Forest



LOCATION AND DESCRIPTION.—This forest lies entirely in Georgia and extends from the South Carolina line across the northern edge of the State. In the northwest corner of Georgia is located the Armuchee Purchase Unit, administered as part of the Chattahoochee National Forest but not included in the scope of this booklet. The forest supervisor of the Chattahoochee has his headquarters at Gainesville. There are three ranger districts, with

headquarters at Clayton, Suches, and Blue Ridge.

The Blue Ridge passes through almost the entire length of this forest, rising abruptly from the Piedmont foothills to a rounded crestline and then sloping gently to the north. Many of the streams south of the Blue Ridge are deeply intrenched, Tallulah Gorge being the most notable example. The beauty of the forest is further enhanced by a number of lakes, among them the chain consisting of Lakes Yonah, Tugaloo, Rabun, Nacoochee, and Burton, southwest of Clayton, and Lake Toccoa near Blue Ridge. There are also many waterfalls, including Goslin Falls near Lake Rabun, Bridge Creek Falls, Amaruby Falls, and Amicalola Falls which is the highest in the State.

Many landmarks and legends were left behind by the Cherokees. Among them may be mentioned Blood and Slaughter Mountains, scene of a fierce Indian battle; Stone Pile Gap, reputed burial place of Princess Tralyta; Yonah Mountain with its lovers' leap; and Warwoman Creek.

Most of the land included in this forest is well wooded. Generally there is excellent young growth and the entire forest is approaching a stage of high productivity. On a 4,000-acre body of timber near Blairsville, known as the Toccoa Experimental Forest, improved methods of forest protection and timber management are tested. The Chattahoochee National Forest has a gross area of 1,270,000 acres, of which 580,000 acres have been purchased by the Government or are in process of acquisition. Upon Government land there is a stand of approximately 960 million board feet of merchantable timber, in addition to 400 million board feet of blight-killed or damaged chestnut. Growth is sufficient to permit an annual cut of more than 17 million board feet.

HUNTING AND FISHING.—Hunting for turkey, quail, and squirrels is good on this forest. The stock of deer has been depleted, but is being built up so that in the future excellent deer hunting will be available. The forest is also good fish-

ing country. Many of the streams are well stocked with rainbow and brook trout; bass and bream are plentiful in the lakes; muskellunge are found in Lake Toccoa.

Within the Chattahoochee National Forest four cooperative wildlife management areas have been established. The streams in these areas have been stocked



F-386649

Lake Rabun, in the Chattahoochee National Forest: One of a chain of power lakes in north Georgia, most of whose water comes from the national forests.

with trout and are opened in rotation for brief periods. Hunting will be permitted when the stock of game has been built up to a point where an annual harvest can be removed. These four areas are:

Cohutta Area.—Includes 40,768 acres at the headwaters of Conasauga and Jacks Rivers. Accessible by Forest Service roads from Blue Ridge and Eton.

Blue Ridge Area.—This includes the 24,500-acre Noontootly National Game Refuge on Noontootly and Rock Creeks on the north side of the Blue Ridge and

an additional 16,635 acres south of the ridge. It is reached by Forest Service roads from Dahlenega on the south and Blue Ridge on the north. On Rock Creek, within the game refuge, is a trout rearing station with complete modern equipment, where 80,000 young trout are raised annually to stock the mountain streams.

Chattahoochee-Chestatee Area.—This area of about 56,000 acres is bounded on the north by the Blue Ridge and lies on the headwaters of the Chattahoochee and Chestatee Rivers and their tributaries. It is reached by U S 19 from Dahlenega and Blairsville and by Georgia Route 75 from Cleveland and Hiwassee.

Lake Burton Area.—This 15,000-acre area lies on the southeast slope of the Blue Ridge on streams draining into Lake Burton. It is accessible by Forest Service roads from Clarkesville on the south and Lakemont on the east, and from U S 76 on the north.

RECREATION.—This forest is within 2 hours drive from Atlanta and other Georgia cities and receives heavy recreational use. Towns within the forest take care of thousands of summer visitors. The Forest Service maintains the following recreation areas:

Warwoman Dell.—Three miles east of Clayton. Picnicking, hiking, and a nature trail.

Rabun Beach.—On the shore of Lake Rabun 3 miles west of Lakemont. Bathing, picnicking, tent and trailer camping.

Tray Mountain.—A roadside picnic area on the Blue Ridge, reached by Forest Service road from Helen.

Chestatee Knoll.—A roadside picnic area on U S 19 between Turners Bridge and Neals Gap.

Lake Winfield Scott.—A 250-acre forested area surrounding a 20-acre lake, more than 2,900 feet above the sea. Reached by Forest Service road from Suches or via Wolf Pen Gap from U S 19. Bathing, picnicking, tent and trailer camping, sites for summer cottages.

Enota Glade.—A small picnic area at the foot of Brasstown Bald.

Woodys Gap.—Picnic facilities where a Forest Service road crosses the Blue Ridge.

Pigeon Creek.—A wayside picnic area southeast of Blue Ridge.

Jacks River.—A picnic area at the foot of a waterfall northwest of Blue Ridge.

Lake Conasauga.—An 18-acre lake more than 3,300 feet above the sea, the highest body of water in Georgia. When development is complete there will be facilities for bathing, picnicking, and camping.

Big Creek.—A roadside picnic area on Georgia Route 106 near Pine Mountain.

Bailey Creek.—A small roadside picnic area on the Scaly-Pine Mountain road northeast of Clayton.

Panther Creek.—On U S 23, 1 mile east of Turnerville. Picnicking.

Fern Springs.—On Georgia Route 13, 4 miles northeast of Cornelia. Picnicking, play area, wading pool.

Cool Spring.—Near Black Mountain tower. Picnicking and hiking.

Chenocetah Mountain.—One and one-half miles from Cornelia. Picnicking.

Camp Wahsega.—An organization camp on a Forest Service road northwest of Dahlonega.

Vogel State Park.—This park is located within the forest but is owned and



F-386661

Bathhouse constructed by the C. C. C. at the Lake Winfield Scott Recreation Area.

operated by the State of Georgia. On U S 19. An inn at Neals Gap; picnic areas, bathing and rental cabins at Lake Tralysa.

ROADS AND TRAILS.—Many scenic highways and forest roads traverse the Chattahoochee National Forest. Among them are:

U S 23 to Tallulah Gorge and Lake Rabun.

U S 19, crossing the Blue Ridge at Neals Gap. Excellent views of gorge of Chestatee River.

Georgia Route 75, crossing the Blue Ridge at Unicoi Gap.

U S 76, traversing the forest from east to west, crossing the Blue Ridge and passing Lakes Burton and Toccoa.

The Scaly-Pine Mountain Road from Clayton to Highlands, N. C. Views of Rabun Bald and Blue Valley.

The Forest Service road leading west from Lakemont along the shores of Lakes Rabun, Nacoochee, and Burton.

The Forest Service road over Tray Mountain.

The Forest Service road, which starts at Stone Pile Gap on U S 19, crosses the Blue Ridge at Woodys Gap, and leads past the Suches Ranger Station, Lake Winfield Scott, and Wolf Pen Gap, rejoining U S 19 at Vogel State Park.

The Forest Service road from U S 19 near Dahlonega, reaching the top of the Blue Ridge at Coopers Gap and following the Ridge west to Hightower Gap, thence north down Rock Creek through the game refuge.

The Forest Service road along Potato Patch Mountain, west of Blue Ridge, and the Holly Creek Road with which it connects on the south.

The Appalachian Trail follows the crest of the Blue Ridge for nearly 90 miles through the Chattahoochee National Forest and affords many scenic views.

IN THE southern Appalachian region in which the Cherokee, Pisgah, Nantahala, Chattahoochee, and Sumter National Forests are located, there has recently been created the Great Smoky Mountains National Park. Saddling over the high crestline of the Great Smoky Mountains, which forms the North Carolina-Tennessee State line, this park will preserve for posterity large areas of primeval high mountain forest. It is administered by the National Park Service of the Department of the Interior. Visitors in the national forests of the southern Appalachians should include the Great Smoky Mountains National Park in their itineraries.

Sumter National Forest



LOCATION AND DESCRIPTION.—This forest, located in South Carolina, has its forest supervisor headquarters at Columbia. It includes three separate divisions, two of which, the Enoree and the Long Cane, are in the Piedmont. The third division, with ranger headquarters at Walhalla, is known as the Mountain Ranger District. It is a rough and rugged section on the southeast slopes of the Blue Ridge. Points of interest include Ellicotts Rock where three States join, Issaqueena Falls and Gorge, the Narrows of the Chauga River, and White Water Falls, with a drop of some 325 feet, near the Walhalla-Cashiers Road. At Old

Oconee Station a stone house erected as an Indian trading post in 1758 still stands.

The Mountain Ranger District has a gross area of 128,000 acres, of which 54,525 acres have been or are in the process of being acquired by the Government. On the land that has been acquired there are more than 100 million board-feet of merchantable timber.

HUNTING AND FISHING.—Wildlife, formerly abundant on this forest, has been depleted, but is now increasing with protection and proper management. Deer have been introduced and are doing well; fur-bearing animals are abundant; turkey, quail, and grouse are increasing. Trout fishing is excellent in many of the mountain streams, and bass can be had at the lower elevations.

A cooperative wildlife management area of 16,000 acres has been established, on which hunting is not yet permitted. The Walhalla Fish Hatchery, built by the Forest Service and operated by the United States Bureau of Fisheries, has an annual capacity of over 1 million trout used for restocking mountain streams. Visitors are welcome at the hatchery.

RECREATION.—The cool uplands of this forest are popular with summer visitors. The Forest Service has developed two recreation areas:

Yellow Branch.—Six miles from Walhalla on Stump House Road. A picnic area especially popular with people from the South Carolina Piedmont section.

Chattooga.—On Chattooga River 24 miles from Walhalla, in a grove of giant white pines and hemlocks. A picnic area with woodland and nature trails. The fish hatchery is just across the stream.



F-386663

A scenic road built and maintained by the U. S. Forest Service on the Sumter National Forest.

Within the forest boundaries is the Oconee State Park of 1,200 acres, owned and managed by the State of South Carolina. In this park are a 20-acre lake for swimming and boating, picnic grounds, and furnished rental cabins.

ROADS AND TRAILS.—Many scenic roads traverse the forest. Among them are U. S. 76 from Westminster to Clayton, Ga., S. C. Route 24 from Walhalla to Highlands, N. C., and a network of roads developed by the Forest Service. Many trails and old woods roads are available for hikers and horseback enthusiasts.

Future Forest Development

IN PRECEDING chapters have been briefly outlined the history and physiography of the southern Appalachians and the formation, development, and special features of the five national forests that occupy the region.

The last 27 years have been formative ones, years in which the national forests were created, lands lying in them acquired and put under administration and protection, and increasing impetus given to their development and utilization. This work will continue; as funds become available more lands will be acquired to round out and consolidate Government holdings; protection and silvicultural management will show increasing results; fishing and hunting will improve; additional facilities for recreation will be developed; revenues will be augmented; the group of forests will become a more and more valuable asset to local communities and to the country as a whole.

Additional information concerning these national forests may be obtained by writing to the Regional Forester, U. S. Forest Service, Atlanta, Ga., or to any of the forest supervisors. Information concerning accommodations in towns in and near the forests can best be obtained by writing directly to the local Chambers of Commerce.



REPORT FOREST FIRES PROMPTLY

Appendix

FOREST TREES OF THE SOUTHERN APPALACHIANS

COMMON NAME	SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME
Northern white pine..	<i>Pinus strobus.</i>	Slippery elm	<i>Ulmus fulva.</i>
Pitch pine.....	<i>Pinus rigida.</i>	Hackberry	<i>Celtis occidentalis.</i>
Shortleaf pine.....	<i>Pinus echinata.</i>	Red mulberry	<i>Morus rubra.</i>
Virginia pine.....	<i>Pinus virginiana.</i>	Cucumber magnolia..	<i>Magnolia acuminata.</i>
Mountain pine.....	<i>Pinus pungens.</i>	Umbrella magnolia...	<i>Magnolia tripetala.</i>
Red spruce.....	<i>Picea rubra.</i>	Mountain magnolia	<i>Magnolia fraseri.</i>
Eastern hemlock.....	<i>Tsuga canadensis.</i>	Yellow poplar	<i>Liriodendron tulipifera.</i>
Carolina hemlock....	<i>Tsuga caroliniana.</i>	Papaw	<i>Asimina triloba.</i>
Southern balsam fir..	<i>Abies fraseri.</i>	Sassafras.....	<i>Sassafras variifolium.</i>
Northern white cedar, or "arborvitae."	<i>Thuja occidentalis.</i>	Witch-hazel.....	<i>Hamamelis virginiana.</i>
Eastern red cedar....	<i>Juniperus virginiana.</i>	Red gum	<i>Liquidambar styraciflua.</i>
Eastern cottonwood..	<i>Populus deltoides.</i>	Sycamore.....	<i>Platanus occidentalis.</i>
Large-tooth aspen....	<i>Populus grandidentata.</i>	Mountain ash	<i>Sorbus americana.</i>
Black willow.....	<i>Salix nigra.</i>	Sweet crab apple....	<i>Malus coronaria.</i>
Pussy willow.....	<i>Salix discolor.</i>	Serviceberry.....	<i>Amelanchier laevis.</i>
Black walnut.....	<i>Juglans nigra.</i>	Hawthorn.....	<i>Crataegus spp.</i>
Butternut.....	<i>Juglans cinerea...</i>	Wild plum.	<i>Prunus americana.</i>
Bitternut hickory....	<i>Hicoria cordiformis.</i>	Pin cherry.....	<i>Prunus pennsylvanica.</i>
Pignut hickory.....	<i>Hicoria pallida.</i>	Black cherry.....	<i>Prunus serotina.</i>
Mockernut hickory...	<i>Hicoria alba.</i>	Redbud.....	<i>Cercis canadensis.</i>
Bigleaf shagbark hick- ory.	<i>Hicoria laciniata.</i>	Honey locust.....	<i>Gleditsia triacanthos.</i>
Shagbark hickory....	<i>Hicoria ovata.</i>	Yellowwood.....	<i>Cladrastis lutea.</i>
Pignut hickory.....	<i>Hicoria glabra.</i>	Black locust.....	<i>Robinia pseudoacacia.</i>
Blue beech.....	<i>Carpinus caroliniana.</i>	Clammy locust.....	<i>Robinia viscosa.</i>
Hop-hornbeam.....	<i>Ostrya virginiana.</i>	Holly.....	<i>Ilex opaca.</i>
Yellow birch.....	<i>Betula lutea.</i>	Mountain holly.....	<i>Ilex montana.</i>
Sweet birch.....	<i>Betula lenta.</i>	Striped maple.....	<i>Acer pennsylvanicum.</i>
Paper birch.....	<i>Betula papyrifera.</i>	Mountain maple....	<i>Acer spicatum.</i>
River birch.....	<i>Betula nigra.</i>	Silver maple.....	<i>Acer saccharinum.</i>
Beech.....	<i>Fagus grandifolia.</i>	Red maple.....	<i>Acer rubrum.</i>
Chestnut.....	<i>Castanea dentata.</i>	Sugar maple.....	<i>Acer saccharum.</i>
Chinquapin.....	<i>Castanea pumila.</i>	Black maple.....	<i>Acer nigrum.</i>
Red oak.....	<i>Quercus borealis.</i>	Boxelder.....	<i>Acer negundo.</i>
Red oak.....	<i>Quercus borealis max- ima.</i>	Yellow buckeye.....	<i>Aesculus octandra.</i>
Pin oak.....	<i>Quercus palustris.</i>	Basswood.....	<i>Tilia neglecta.</i>
Black oak.....	<i>Quercus velutina.</i>	Basswood.....	<i>Tilia floridana alabamensis.</i>
Scarlet oak.....	<i>Quercus coccinea.</i>	Basswood.....	<i>Tilia venulosa.</i>
Southern red oak...	<i>Quercus rubra.</i>	White basswood....	<i>Tilia monticola.</i>
Blackjack oak.....	<i>Quercus marilandica.</i>	White basswood....	<i>Tilia heterophylla.</i>
Shingle oak	<i>Quercus imbricaria.</i>	Black gum.....	<i>Nyssa sylvatica.</i>
Chinquapin oak	<i>Quercus muhlenbergii.</i>	Dogwood	<i>Cornus florida.</i>
Chestnut oak.....	<i>Quercus montana.</i>	Blue dogwood.....	<i>Cornus alternifolia.</i>
Post oak.....	<i>Quercus stellata.</i>	Rosebay, or "white" rhododendron.	<i>Rhododendron maximum.</i>
White oak	<i>Quercus alba.</i>	Catawba rhododendron	<i>Rhododendron catawbi- ense.</i>
Red elm	<i>Ulmus serotina.</i>	Mountain laurel....	<i>Kalmia latifolia.</i>
Winged elm.....	<i>Ulmus alata.</i>	Sourwood.....	<i>Oxydendrum arboreum.</i>

FOREST TREES OF THE SOUTHERN APPALACHIANS—Continued

COMMON NAME	SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME
Persimmon.....	<i>Diospyros virginiana.</i>	Fringetree.....	<i>Chionanthus virginica.</i>
Silverbell.....	<i>Halesia carolina.</i>	Rusty blackhaw.....	<i>Viburnum rufidulum.</i>
White ash.....	<i>Fraxinus americana.</i>	Blackhaw.....	<i>Viburnum prunifolium.</i>
Red ash.....	<i>Fraxinus pennsylvanica.</i>		

SOME FOREST SHRUBS OF THE SOUTHERN APPALACHIANS

COMMON NAME	SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME
American Elder.....	<i>Sambucus canadensis.</i>	Mountain andromeda.	<i>Pieris floribunda.</i>
Beaked hazelnut....	<i>Corylus rostrata.</i>	Oilnut.....	<i>Pyrularia pubera.</i>
Blackberries, dew-berries, raspberries.	<i>Rubus</i> spp.	Pasture gooseberry...	<i>Grossularia cynosbati.</i>
Black huckleberry....	<i>Gaylussacia baccata</i>	Piedmont azalea.....	<i>Azalea canescens.</i>
Bush euonymus, or "strawberrybush."	<i>Euonymus americanus.</i>	Piedmont rhododendron.	<i>Rhododendron minus.</i>
Carolina rhododendron	<i>Rhododendron carolinianum.</i>	Pinkshell azalea.....	<i>Azalea vaseyi.</i>
Cinnamon clethra, or "mountain pepperbush."	<i>Clethra acuminata.</i>	Pinxterbloom, or "purple azalea."	<i>Azalea nudiflora.</i>
Common blackcap or "black raspberry."	<i>Rubus occidentalis.</i>	Possumhaw, or "deciduous holly."	<i>Ilex decidua.</i>
Common raspberry...	<i>Rubus strigosus.</i>	Red chokeberry.....	<i>Aronia arbutifolia</i>
Common sweetleaf...	<i>Symplocos tinctoria.</i>	Rose-acacia.....	<i>Robinia hispida.</i>
Common winterberry.	<i>Ilex verticillata.</i>	Scarlet elder.....	<i>Sambucus pubens.</i>
Coralberry.....	<i>Symphoricarpos orbiculatus.</i>	Shining sumac.....	<i>Rhus copallina.</i>
Deerberry.....	<i>Polycodium stamineum.</i>	Silky dogwood.....	<i>Cornus amomum.</i>
Devils-club.....	<i>Aralia spinosa.</i>	Silverleaf hydrangea..	<i>Hydrangea radiata.</i>
"Fetterbush".....	<i>Eubotrys recurva</i>	Smooth hydrangea...	<i>Hydrangea arborescens.</i>
Flame azalea.....	<i>Azalea calendulacea.</i>	Smooth sumac.....	<i>Rhus glabra.</i>
Flowering raspberry..	<i>Rubus odoratus.</i>	Smooth sweetshrub...	<i>Calycanthus fertilis.</i>
Hazel alder.....	<i>Alnus rugosa.</i>	Smooth withe-rod, or "swamp-haw."	<i>Viburnum nudum.</i>
Hobblebush, or "witch-hobble."	<i>Viburnum alnifolium.</i>	Southern bush-honeysuckle.	<i>Diervilla sessilifolia.</i>
Jersey-tea.....	<i>Ceanothus americanus.</i>	Spicebush.....	<i>Benzoin aestivale.</i>
Lambkill or "sheep-laurel."	<i>Kalmia angustifolia.</i>	Swamp azalea.....	<i>Azalea viscosa.</i>
Mapleleaf viburnum..	<i>Viburnum acerifolium.</i>	Swamp rose.....	<i>Rosa palustris.</i>
		Sweet azalea.....	<i>Azalea arborescens.</i>
		Sweetfern.....	<i>Comptonia peregrina.</i>
		Withe-rod, or "wild-raisin."	<i>Viburnum cassinoides.</i>

VINES OF THE SOUTHERN APPALACHIANS

COMMON NAME	SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME
American bittersweet.	<i>Celastrus scandens.</i>	Frost grape.....	<i>Vitis cordifolia.</i>
Bristly greenbrier....	<i>Smilax hispida.</i>	Greenbrier.....	<i>Smilax rotundifolia.</i>
Common poison ivy..	<i>Toxicodendron radicans.</i>	Muscadine grape....	<i>Vitis rotundifolia.</i>
Decumaria or "cow-itch".....	<i>Decumaria barbara.</i>	Riverbank grape....	<i>Vitis vulpina.</i>
Drooping leucothoe...	<i>Leucothoe catesbaei.</i>	Sawbrier.....	<i>Smilax glauca.</i>
Dutchmans pipe.....	<i>Aristolochia macrophylla.</i>	Summer grape.....	<i>Vitis aestivalis.</i>
Fox grape.....	<i>Vitis labrusca.</i>	Virginia creeper.....	<i>Parthenocissus quinquefolia.</i>

A PARTIAL LIST OF FLOWERING HERBACEOUS PLANTS OF THE
SOUTHERN APPALACHIANS

COMMON NAME	SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME
Agrimonies.....	<i>Agrimonia</i> spp.	Goldenrods.....	<i>Solidago</i> spp.
Allegheny foamflower.	<i>Tiarella cordifolia</i> .	Goldeye-grass	<i>Hypoxis hirsuta</i> .
Allegheny monkey-flower.	<i>Mimulus ringens</i> .	Halberdleaf, or "yellow" violet.	<i>Viola hastata</i> .
American anemone...	<i>Anemone quinquefolia</i> .	Hawkweeds.....	<i>Hieracium</i> spp.
American columbine...	<i>Aquilegia canadensis</i> .	Horsenettle	<i>Solanum carolinense</i> .
"American feverfew".	<i>Parthenium integrifolium</i> .	Indian paintbrush....	<i>Castilleja coccinea</i> .
American ginseng...	<i>Panax quinquefolium</i> .	Indianpipe.....	<i>Monotropa uniflora</i> .
American spikenard.	<i>Aralia racemosa</i> .	Indian-plantain.....	<i>Mesadenia atriplicifolia</i> .
Angelicas.....	<i>Angelica</i> spp.	Indian-tobacco.....	<i>Lobelia inflata</i> .
Arrowhead.....	<i>Sagittaria pubescens</i> .	Jack-in-the-pulpit...	<i>Arisaema triphyllum</i> .
Asters.....	<i>Aster</i> spp.	Lambsquarters.....	<i>Chenopodium album</i> .
Bebb zizia, or "goldenalexanders."	<i>Zizia bebbii</i> .	Large purple fringe-orchid.	<i>Blephariglottis grandiflora</i> .
Birdsfoot violet.....	<i>Viola pedata</i> .	Leconte, or "sweet white" violet.	<i>Viola leconteana</i> .
Black-eyed-susan.....	<i>Rudbeckia hirta</i> .	Lyreleaf sage.....	<i>Salvia lyrata</i> .
Bloodroot.....	<i>Sanguinaria canadensis</i>	Maryland figwort....	<i>Scrophularia marilandica</i> .
Bluecurls.....	<i>Trichostema dichotomum</i> .	Maryland golden-aster.	<i>Chrysopsis mariana</i> .
Blue-eyed-grass.....	<i>Sisyrinchium angustifolium</i> .	Meadow-parsnip. (See Bebb zizia.)	
Boneset.....	<i>Eupatorium perfoliatum</i> .	Mistflower.....	<i>Eupatorium coelestinum</i> .
Bouncing-bet.....	<i>Saponaria officinalis</i> .	Mothmullein.....	<i>Verbascum blattaria</i> .
Bowmansroot	<i>Porteranthus trifoliatu</i> s.	Mountain houstonia, or "bluet."	<i>Houstonia purpurea</i> .
Burnweed or "fireweed"	<i>Erechtites hieracifolia</i> .	Mountain-mints.....	<i>Koellia</i> spp.
Buttercups.....	<i>Ranunculus</i> spp.	"Northern white violet."	<i>Viola pallens</i> .
Butterflyweed.....	<i>Asclepias tuberosa</i> .	Oconee-bells.....	<i>Shortia galacifolia</i> .
Buttonweeds.....	<i>Diodia</i> spp.	Oswego beebalm.....	<i>Monarda didyma</i> .
Cardinalflower.....	<i>Lobelia cardinalis</i> .	Oxeye daisy.....	<i>Chrysanthemum leucanthemum</i> .
Carolina lily.....	<i>Lilium michauxii</i> .	Parnassia, or "bog star."	<i>Parnassia grandifolia</i> .
Carolina thermopsis, or "Aaronsrod".	<i>Thermopsis caroliniana</i> .	Partridgeberry.....	<i>Mitchella repens</i> .
Cinquefoils.....	<i>Potentilla</i> spp.	Pencilflower.....	<i>Stylosanthes riparia</i> .
Citronella horsebalm..	<i>Collinsonia canadensis</i> .	Pennyroyal.....	<i>Hedeoma pulegioides</i> .
Clambering monkshood	<i>Aconitum uncinatum</i> .	"Pink fringe-orchid"..	<i>Blephariglottis peramoen</i> a.
Closed gentian	<i>Gentiana saponaria</i> .	Pinweeds.....	<i>Lechea</i> spp.
Cohosh bugbane.....	<i>Cimicifuga racemosa</i> .	Polk milkweed.....	<i>Asclepias exaltata</i> .
Common mayapple...	<i>Podophyllum peltatum</i> .	Poor-robins-plantain..	<i>Erigeron pulchellus</i> .
Common motherwort	<i>Leonurus cardiaca</i> .	Porcelain butterfly-pea.	<i>Clitoria mariana</i> .
Common sundrops	<i>Kneiffia fruticosa</i> .	Purple agalinis, or "false foxglove."	<i>Agalinis purpurea</i> .
Common troutlily, or "adder's tongue."	<i>Erythronium americanum</i> .	Rockcress.....	<i>Arabis laevigata</i> .
Cranesbill.....	<i>Geranium carolinianum</i> .	Rosegentian.....	<i>Sabbatia angularis</i> .
Creeping oxalis.....	<i>Oxalis corniculata</i> .	Rosinweed.....	<i>Silphium compositum</i> .
Cucumber-root.....	<i>Medeola virginiana</i> .	Sanicle, or "black snakeroot."	<i>Sanicula trifoliata</i> .
Dandelion.....	<i>Leontodon taraxacum</i> .	Sarothra, or "orange-grass."	<i>Sarothra gentianoides</i> .
Early woodbetony....	<i>Pedicularis canadensis</i> .	Sensitive-peas.....	<i>Cassia (chamaecrista)</i> spp.
Evening primrose....	<i>Oenothera biennis</i> .	Sheep sorrel.....	<i>Rumex acetosella</i> .
Fairywand.....	<i>Chamaelirium luteum</i> .		
Firepink.....	<i>Silene virginica</i> .		
Fringed loosestrife...	<i>Steironema ciliatum</i> .		
Galax.....	<i>Galax aphylla</i> .		
Gaura.....	<i>Gaura biennis</i> .		
Gayfeather.....	<i>Lacinaria scariosa</i> .		
Gentian	<i>Gentiana decora</i> .		
Gerardias, or "false-foxgloves."	<i>Aureolaria</i> spp.		
Golden groundsel....	<i>Senecio aureus</i> .		

A PARTIAL LIST OF FLOWERING HERBACEOUS PLANTS OF THE
SOUTHERN APPALACHIANS—Continued

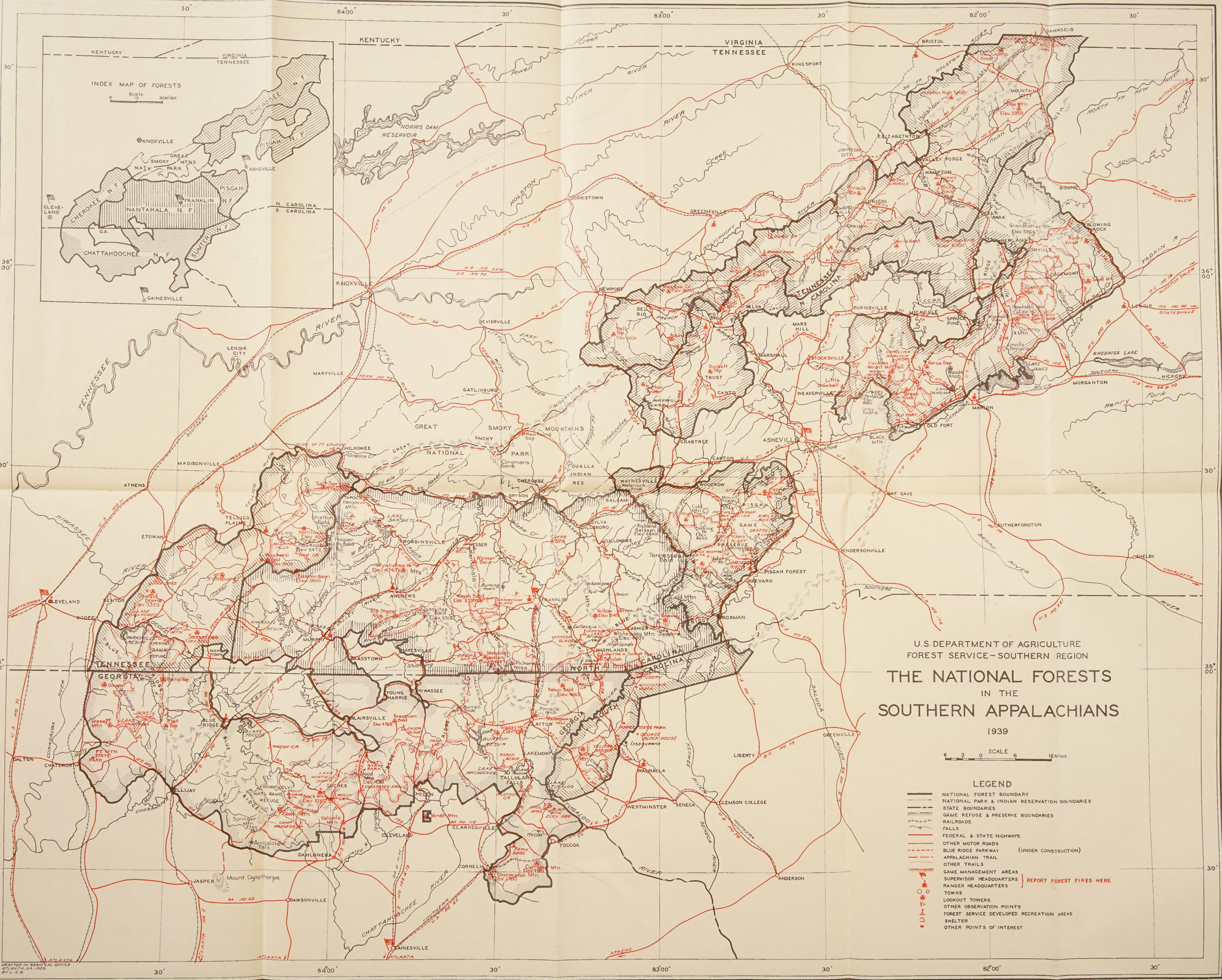
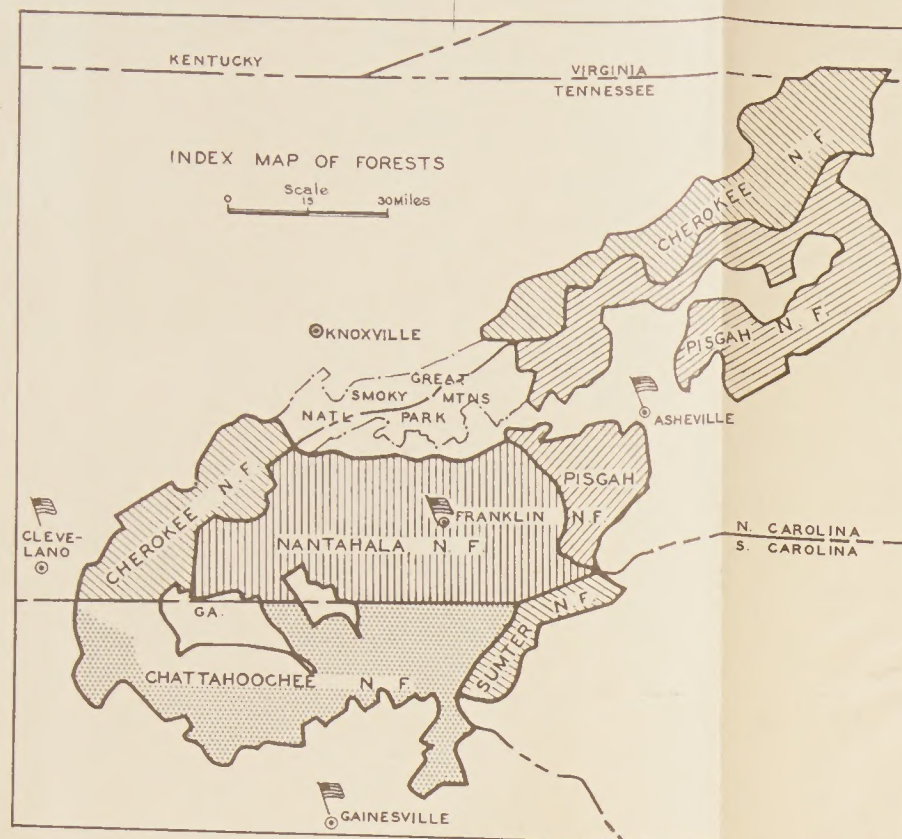
COMMON NAME	SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME
Shepherds-purse	<i>Bursa bursa-pastoris.</i>	Sunflowers	<i>Helianthus</i> spp.
Skullcap	<i>Scutellaria incana.</i>	Tall bellflower	<i>Campanula divaricata.</i>
Small purple fringe-orchid.	<i>Blephariglottis psycodes.</i>	Tickclovers	<i>Meibomia</i> spp.
Small yellow ladyslipper.	<i>Cypripedium parviflorum.</i>	Trailing-arbutus	<i>Epigaea repens.</i>
Smooth phlox	<i>Phlox glaberrima.</i>	Trilliums	<i>Trillium</i> spp.
Southern pogonia, or "rose orchid."	<i>Pogonia (cleistes) divaricata.</i>	Turtleheads	<i>Chelone</i> spp.
Spotted geranium	<i>Geranium maculatum.</i>	Umbrellaleaf	<i>Diphylleia cymosa.</i>
Spotted snapweed	<i>Impatiens biflora.</i>	Venus lookingglass	<i>Specularia perfoliata.</i>
Spotted spurge, or "milk-purslane."	<i>Chamaesyce maculata.</i>	Violet woodsorrel	<i>Oxalis violacea.</i>
Stargrass	<i>Aletris farinosa.</i>	Virginia peppergrass	<i>Lepidium virginicum.</i>
Starry campion	<i>Silene stellata.</i>	Virginia spiderwort	<i>Tradescantia virginianc.</i>
Stiff gentian	<i>Gentiana quinquefolia.</i>	Wild strawberry	<i>Fragaria virginiana.</i>
St. Johnsworts	<i>Hypericum</i> spp.	White beebalm	<i>Monarda clinopodia.</i>
Strawberry violet	<i>Viola primulifolia.</i>	Wild bergamot	<i>Monarda fistulosa.</i>
		Wild-sarsaparilla	<i>Aralia nudicaulis.</i>
		Yellow fringe-orchid	<i>Blephariglottis ciliaris.</i>
		Yellow wild-indigo	<i>Baptisia tinctoria.</i>

FERNS OF THE SOUTHERN APPALACHIANS

COMMON NAME	SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME
American maidenhair fern.	<i>Adiantum pedatum.</i>	Interrupted fern	<i>Osmunda claytoniana.</i>
Bracken	<i>Pteridium latiusculum.</i>	New York fern	<i>Dryopteris noveboracensis.</i>
Christmas fern	<i>Polystichum acrostichoides.</i>	Rattlesnake fern	<i>Botrychium virginianum.</i>
Cinnamon fern	<i>Osmunda cinnamomea.</i>	Royal fern	<i>Osmunda regalis.</i>
Ebony spleenwort	<i>Asplenium platyneuron.</i>	Sensitive fern	<i>Onoclea sensibilis.</i>
Hay-scented fern	<i>Dennstaedtia punctilobula.</i>	Winged woodfern	<i>Dryopteris hexagonoptera.</i>

BE EXTRA CAREFUL WITH FIRE,
CIGARETTES, AND MATCHES—ALWAYS URGE
OTHERS TO BE CAREFUL—ALWAYS

TWENTY-FIVE CENTS
*of every dollar received from
the sale of products of na-
tional-forest lands is returned
to the county for roads and
schools • You are visiting the
forest because it is beautiful.
It can be kept beautiful by
keeping camps clean and camp-
fires small and by making
sure your tobacco or match
is out before you throw it
away • The forest ranger is
glad to help you. IF YOU
DO NOT KNOW, ASK
THE FORESTRANGER.*



U.S. DEPARTMENT OF AGRICULTURE
FOREST SERVICE - SOUTHERN REGION

THE NATIONAL FORESTS IN THE SOUTHERN APPALACHIANS

1939

6 3 0 SCALE 6 12 Miles

- LEGEND**
- NATIONAL FOREST BOUNDARY
 - NATIONAL PARK & INDIAN RESERVATION BOUNDARIES
 - STATE BOUNDARIES
 - GAME REFUGE & PRESERVE BOUNDARIES
 - RAILROADS
 - FALLS
 - FEDERAL & STATE HIGHWAYS
 - OTHER MOTOR ROADS
 - BLUE RIDGE PARKWAY (UNDER CONSTRUCTION)
 - APPALACHIAN TRAIL
 - OTHER TRAILS
 - GAME MANAGEMENT AREAS
 - SUPERVISOR HEADQUARTERS
 - RANGER HEADQUARTERS
 - TOWNS
 - LOOKOUT TOWERS
 - OTHER OBSERVATION POINTS
 - FOREST SERVICE DEVELOPED RECREATION AREAS
 - SHELTER
 - OTHER POINTS OF INTEREST
- REPORT FOREST FIRES HERE

U.S. Forest Service,
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Southern Appala-

